

Date: Thursday, 5/3/2007 11:38:53 AM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : TUBE ASSEMBLY 6"
Job Number : 32202	
Estimate Number : 11194	
P.O. Number : <i>N/A</i>	Part Number : D3298009
This Issue : 5/3/2007 S.O. No. : <i>N/A</i>	Drawing Number : D3298 REV A2
Prsht Rev. : NC	Project Number : N/A
First Issue : <i>N/A</i> Type : SMALL /MED FAB	Drawing Revision : A2
Previous Run : 28230	Material : <i>N/A</i>
Written By : _____	Due Date : 5/10/2007 Qty: 5 Um: Each
Checked & Approved By : <i>[Signature]</i>	
Comment : Est A 04.09.08 New issue KJ/JLM	

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	M6061T6T0375W035	6061-T6 Tube .375 x.035W
-----	------------------	--------------------------



Comment: Qty.: 0.5250 f(s)/Unit Total : 2.6250 f(s)

Cut tube to length as per Dwg D3298

Material: 6061-T6 (WW-T-700/6) tubing Ø0.375" x 0.035" wall (M6061T6T0.375W.035)

Identify as D3298-009

Batch: *M103646*

*ml 07/05/07*

2.0	MS208196D	Sleeve
-----	-----------	--------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Sleeve

Pick:

Qty	Part Number	Description	Batch
-----	-------------	-------------	-------

1	MS20819-6D	Sleeve	<i>M103044 X5</i>
---	------------	--------	-------------------



3.0	AN8186D	Nut
-----	---------	-----



Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s)

Coupling Nut

Pick:

Qty	Part Number	Description	Batch
-----	-------------	-------------	-------

1	AN818-6D	Nut	<i>M103154</i>
---	----------	-----	----------------



*ml 07/05/07*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: PD Date: 07/05/15  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 5/3/2007 11:38:53 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE ASSEMBLY 6"

Job Number: 32202

Part Number: D3298009

Job Number:



Seq. #:

Machine Or Operation:

Description :

4.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Flare end as per Dwg D3298.

Ensure that sleeves and coupling are installed first

ml 07/05/07

x5

(P10)

5.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

0705-10 (5)

6.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify with P/N and B/N using a permanent fine point marker, then Stock

Location: 5782

7/5/11 (5)

7.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

0705115

Job Completion

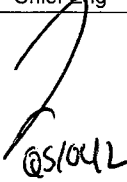
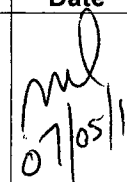
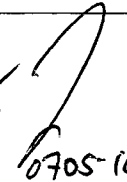

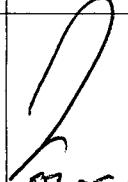


u 070514

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/05/08	4.0	3 parts scrap, Flare not made as per <u>draw</u> and parts were buff to much	 @S1042	destroy part and replace	 07/05/15	 0705-10	 @S1042	 0705-10

NOTE: Date & initial all entries



DESIGN #	DRAWN BY #	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3298	REV. A SHEET 1 OF 7
DATE 04.07.06		TITLE TUBE ASSEMBLIES	SCALE NTS
A	04.07.06	NEW ISSUE	
A1	# 04.11.30	CORRECT VIEW D3298-003; 16.50 WAS 15.75	
A2	# 05.05.06	FOR D3298-001/-003 16.00 WAS 16.50	

RELEASED  
04.07.09 #

P/N	TEMPLATE	CUT LENGTH OF TUBE	MS20819-6D SLEEVE	AN818-6D NUT	DESC.	MATERIAL
D3298-001	D3298-001T1	25.00	2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W (WW-T-700/6)
D3298-003	D3298-003T1	27.00	2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W (WW-T-700/6)
D3298-005	D3298-005T1	23.00	2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W (WW-T-700/6)
D3298-007	D3298-007T1	8.00	2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W (WW-T-700/6)
D3298-009	D3298-009T1	6.00	1	1	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W (WW-T-700/6)
D3298-011	D3298-011T1	8.00	2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W (WW-T-700/6)
D3298-013	D3298-013T1	10.00	2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W (WW-T-700/6)
D3298-015	D3298-015T1	14.00	1	1	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W (WW-T-700/6)

**Notes:**

- (1) TUBING ASSEMBLIES TO BE CUT AND BENT IN ACCORDANCE WITH TEMPLATES.
- (2) TUBES TO BE FLARED 37° TO MATE WITH FITTINGS MADE TO MS33514.
- (3) ENSURE SEAMLESS TUBING IS USED.
- (4) 5052 (WW-T-700/4) TUBING MAY BE SUBSTITUTED WHEN 6061 TUBING IS NOT AVAILABLE.
- (5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- (6) ALL DIMENSIONS ARE IN INCHES
- (7) IDENTIFY WITH DART P/N & B/N USING FINE POINT PERMANENT MARKER

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 32202

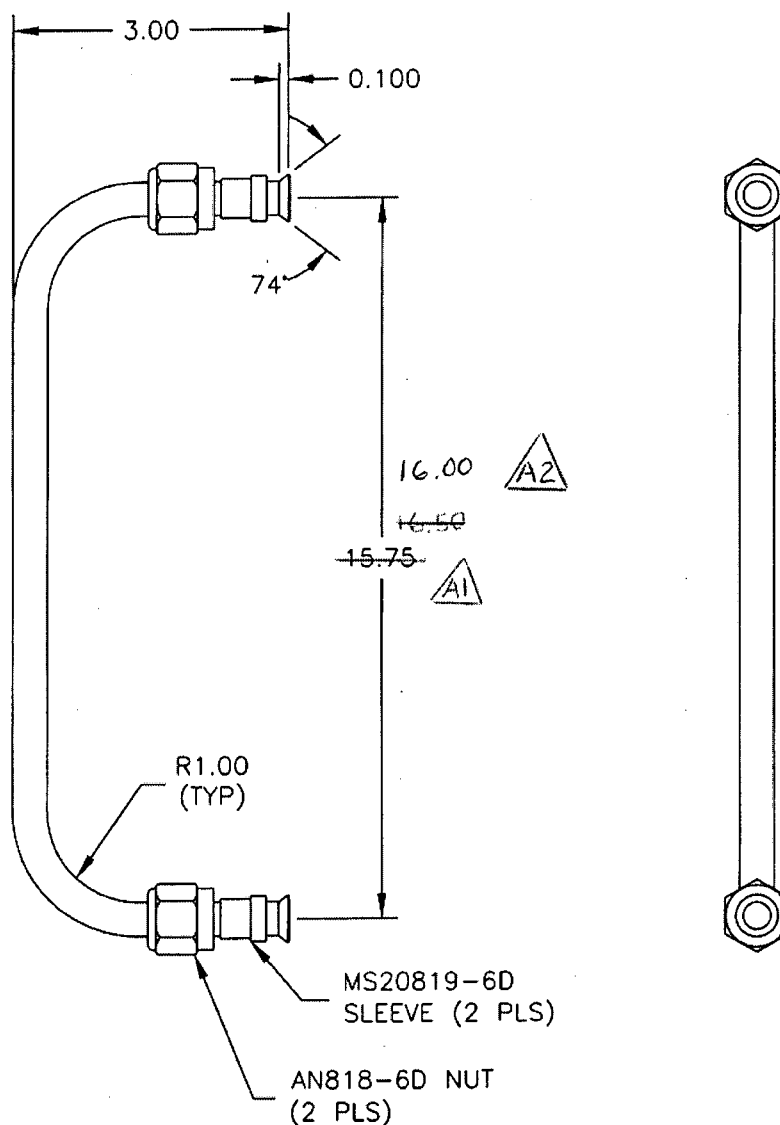
Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN DT	DRAWN BY DT	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D3298	REV. A SHEET 2 OF 7
DATE 04.07.06		TITLE TUBE ASSEMBLIES	SCALE NTS

RELEASED  
04.09.09 [Signature]



D3298-001

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 32202

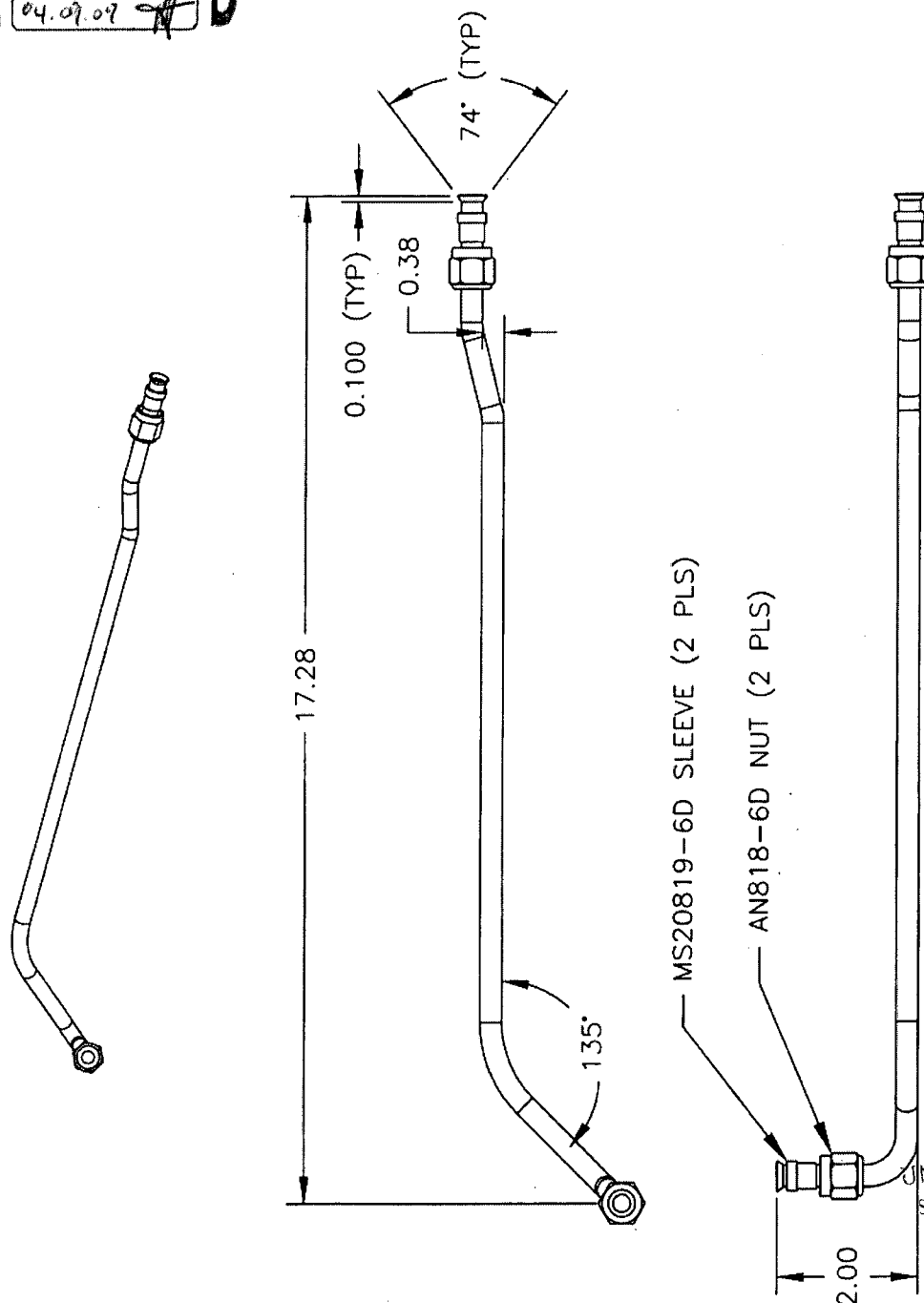
Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN #	DRAWN BY #	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3298	REV. A SHEET 3 OF 7
DATE 04.07.06		TITLE TUBE ASSEMBLIES	SCALE NTS

RELEASED  
04.07.07



D3298-005

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 32202

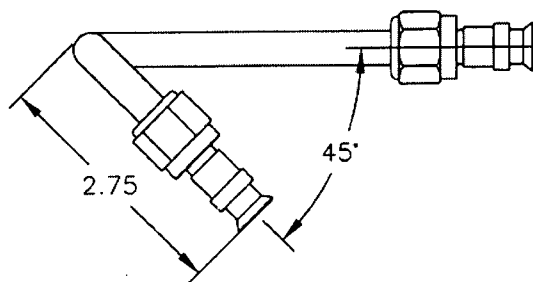
Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

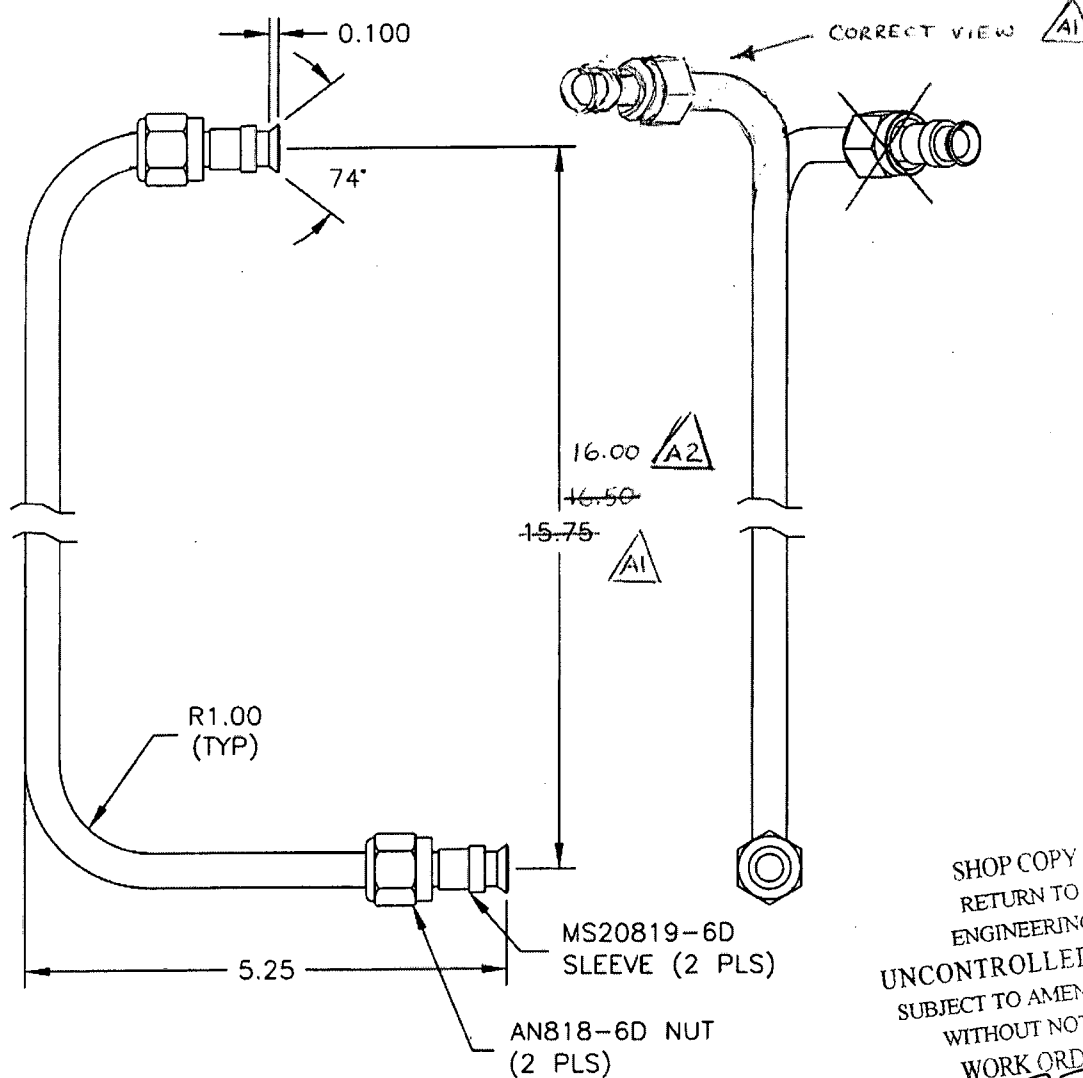


DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3298	REV. A SHEET 4 OF 7
DATE 04.07.06		TITLE TUBE ASSEMBLIES	SCALE NTS

RELEASED  
04.09.07



D3298-003



SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 32202

Copyright © 2004 by DART AEROSPACE LTD

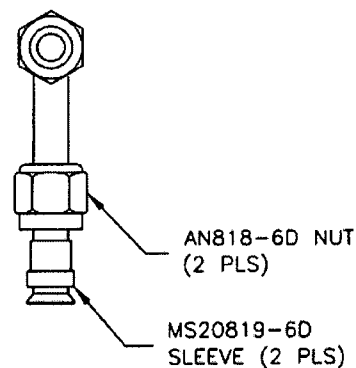
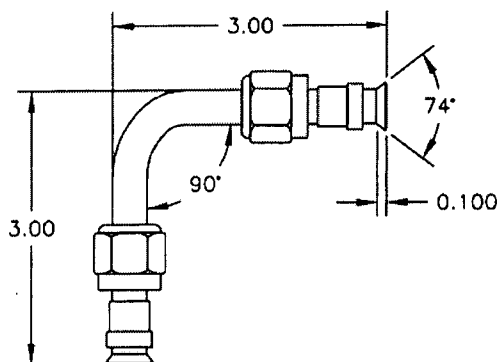
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



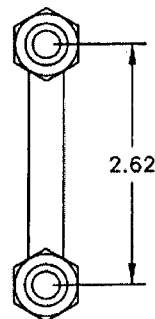
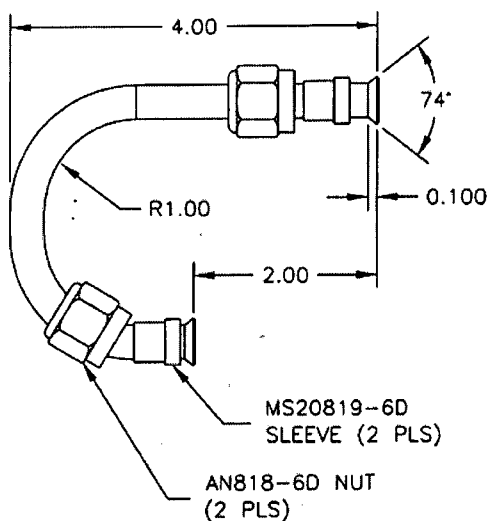


DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3298	REV. A SHEET 5 OF 7
DATE 04.07.06		TITLE TUBE ASSEMBLIES	SCALE NTS

RELEASED  
04.09.09 *[Signature]*



**D3298-007**



**D3298-013**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 32202

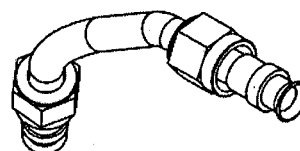
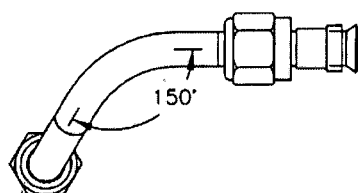
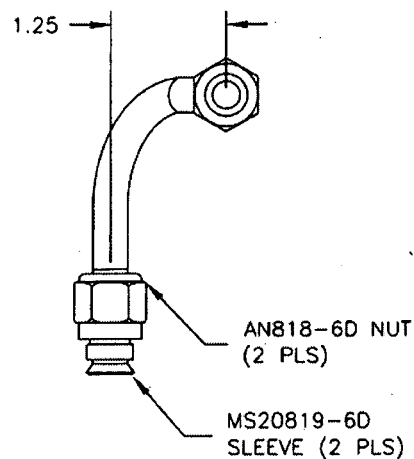
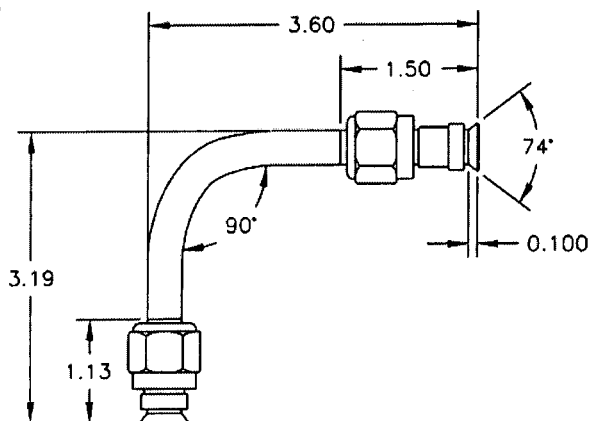
Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

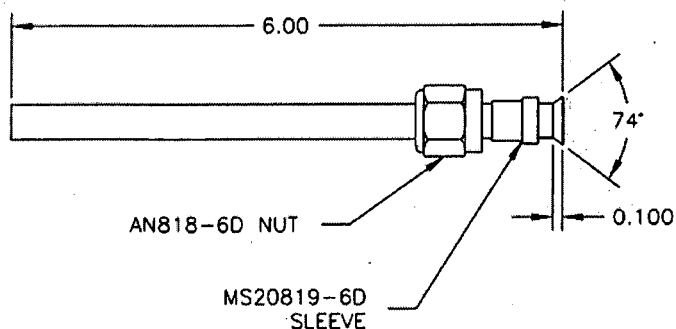


DESIGN #	DRAWN BY #	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3298	REV. A SHEET 6 OF 7
DATE 04.07.06	TITLE TUBE ASSEMBLIES		SCALE NTS

RELEASED  
BY 07.09



**D3298-011**



**D3298-009**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
32202

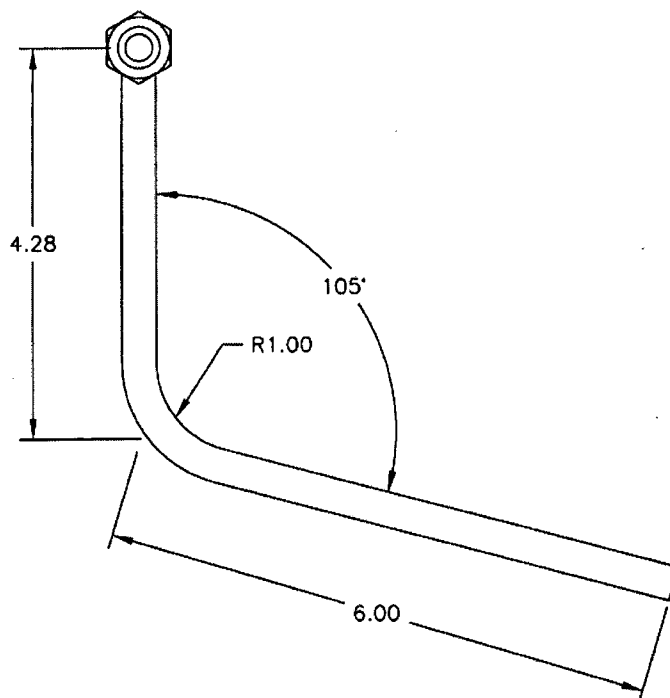
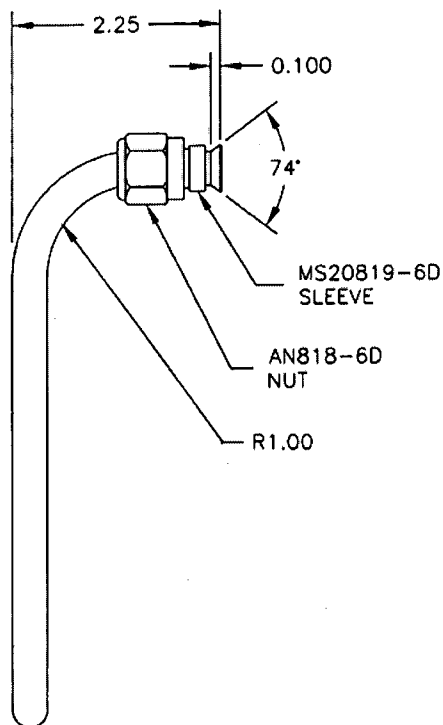
Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN #	DRAWN BY #	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3298	REV. A SHEET 7 OF 7
DATE 04.07.06		TITLE TUBE ASSEMBLIES	SCALE NTS

RELEASED  
04.07.06



**D3298-015**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 32202

Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.